

REMARKS

Claims 1-39 are pending in the application with claims 1, 18, and 28 being independent claims. Of the pending claims, claims 1-17 and 28-39 are under consideration, and claims 18 – 27 are withdrawn from consideration.

Response to Restriction Requirement

The restriction requirement has been maintained, and the requirement has been made final.

In response, Applicants respectfully request reconsideration of the requirement, and rejoinder of the nonelected claims upon allowance of the elected claims.

Response to Rejection under 35 U.S.C. § 103(a)

The Office Action maintains the rejection of claims 1-17 and 28-39 under 35 U.S.C. § 103(a) as allegedly being unpatentable over JP 2003-055747. The Action argues that the rejection is based on the broad disclosure of composition ranges in the '747 document "rather than preferred embodiments", i.e., the requirement of $(2\text{Mo} + \text{W}) = 15 - 30\%$.

In response, Applicants respectfully submit that the Office misinterprets the disclosure of the '747 document. As Applicants have previously noted, the '747 document allows that W may be 1-20% and Mo may be 1-10%, *provided that* $(2\text{Mo} + \text{W}) = 15 - 30\%$. This latter limitation is just that – a limitation. It is no more a preference than W of 1-20% is a preference or that Mo of 1-10% is a preference. To suggest otherwise is to ignore the entirety of the '747 teaching.

Thus, a person of ordinary skill in the art would read the disclosure of the '747 document as requiring that the amounts of W and Mo be chosen so that the equation of $2\text{Mo} + \text{W} = 15 - 30\%$. While amounts of W and Mo would be chosen such that each, *separately*, would be within the range of 1-20% and 1-10%, respectively, the amounts would be chosen so that the requirement of $(2\text{Mo} + \text{W}) = 15 - 30\%$ is satisfied. Under no circumstances would W and Mo be chosen such that $(2\text{Mo} + \text{W})$ is not 15 – 30%.

The '747's requirement of $(2\text{Mo} + \text{W}) = 15-30\%$ is reflected throughout the disclosure, such as in the abstract, the claims, all supporting examples, and on several occasions in the specification. The '747 document clearly teaches alloy compositions that require a high carbide content caused by the high amounts of Mo and W, and wherein the alloy compositions possess specific properties necessitated by such high carbide content. The combination of Mo and W are chosen such that those characteristics are maintained.

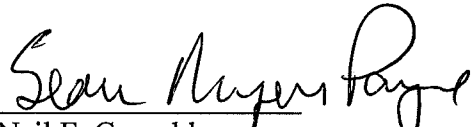
In contrast, the presently claimed invention allows for Mo and W contents as high as 3.8% for Mo and 3.4 % for W. If the equation $(2\text{Mo} + \text{W})$ is applied to the presently claimed invention, the value is 11.0%, which is clearly less than the required amount of 15% in the '747 document. Thus, when the '747 document is considered as a whole, as the Patent Office is required to consider it, it is clear that its teachings do not render obvious the presently claimed invention – indeed, the '747 document actually teaches away from the present invention. Applicants respectfully submit that a person of ordinary skill in the art would not be guided by the disclosure of the '747 patent to select the composition ranges of the presently claimed invention.

In view of the foregoing, Applicants respectfully request withdrawal of the obviousness rejection of claims 1-17 and 28-39 over JP '747.

CONCLUSION

In view of the foregoing, it is believed that all claims in this application are in condition of allowance, which action is respectfully requested. If any issues yet remain which can be resolved by a telephone conference, the Examiner is respectfully invited to contact the undersigned at the telephone number below.

Respectfully submitted,
Ingrid SCHEMMEL et al.


Neil F. Greenblum
Reg. No. 28,394 42,920

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GREENBLUM & BERNSTEIN P.L.C.
1950 Roland Clarke Place
Reston, VA 20191
(703) 716 1191